

FY2015 Funding Request

Iowa Secretary of Agriculture Bill Northey has requested \$6.65 million for the Iowa Water Quality Initiative and \$1 million to support urban conservation as part of the Iowa Department of Agriculture and Land Stewardship's fiscal year 2015 budget request.

The Department received \$2.4 million for the current fiscal year to support the initiative as well as \$20 million in one-time appropriations to support conservation and water quality improvements in Iowa.



The Water Quality Initiative funding would allow the Department to continue and expand its work to address the quality of our streams and water resources in a scientific, reasonable and cost effective manner. Funds would prioritize cost share programs in targeted watersheds and allow flexibility to incentivize statewide practice implementation.

The urban conservation funding would support a robust effort to improve water quality through cost-sharing implementation of urban best practices and Low Impact Development (LID) strategies. The program would enhance urban education and outreach efforts by funding two Urban Conservation Coordinators through a fifteen-percent administration fee.

"I appreciate the strong support the Governor, Lt. Gov. and Legislature have shown for voluntary, science based conservation efforts and this request is designed to help us build on progress we have made to this point," Northey said. "This level of funding would put the water quality initiative at the same level as the soil conservation cost share program we have operated for decades. And, the \$1 million for an urban conservation program would help engage Iowans living in our towns and cities in conservation efforts."

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IOWA WATER QUALITY INITIATIVE

2014 Legislative Report

2013: Exciting Water Quality Progress

Thank you for your strong support of the voluntary, science-based Iowa Water Quality Initiative (WQI). 2013 was a year of tremendous progress. Iowa farmers are extremely engaged and we have seen an overwhelming response from our state's agriculture community.

- Over 1,000 farmers, spread out over every county in Iowa, signed up for cost share funding to implement new water quality practices on their farms
- As of the end of 2013, over \$2.2 million of WQI funding was distributed with farmers providing at least that same amount of their own money
- Eight watershed demonstration projects were selected
- \$4.1 million of WQI funding was obligated to these demonstration projects over the next three years
- An additional \$8 million in matching funds will support water quality improvement efforts in these demonstration projects

A lot of progress has been made and a lot of work is still to be done. We are on the right path. Iowa is a national leader in agriculture and is leading the way using voluntary, science-based practices to improve water quality.



Bill Northey, Iowa
Secretary of Agriculture

Iowa Water Quality Initiative

The Water Quality Initiative was established during the 2013 legislative session to assist the implementation of the Nutrient Reduction Strategy (NRS). The NRS provides a road map to achieve a 45% reduction in nitrogen and phosphorus losses to our waters using an integrated approach with point and non-point sources working together.

The WQI seeks to harness the collective ability of both private and public resources and organizations to rally around the NRS and deliver a clear and consistent message to the agricultural community to reduce nutrient loss and improve water quality.

Statewide Practices Cost-Share

In August of 2013, \$2.8 million was made available through all 100 Soil and Water Conservation Districts to help implement conservation practices through the Water Quality Initiative (WQI). After an initial \$1.8 million was offered and subsequently obligated in less than a week, a supplement of \$1 million was added to the fund and this additional funding spoken for within another week.

The strong level of commitment showcased by Iowa farmers volunteering to try something new on their farms to help water quality is a testament to the level of engagement farmers are ready to take on these issues. Over 1,000 farmers committed an additional \$2.8 million in landowner match to help implement these practices. Each landowner or farmer could apply for up to 160 acres of cost-shared practice. Some of the applicants used the practice on more acres than they applied for cost-share.

Practice Info

The practices offered through the WQI Statewide initiative were selected because of their ability to be implemented in a short time frame and thereby providing a water quality benefit in 2013. The statewide approach gave farmers an opportunity to try these practices for the first time.

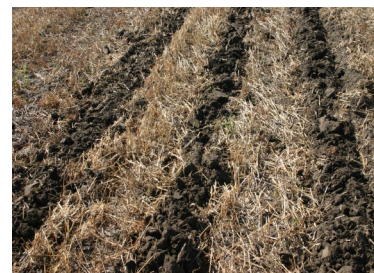
Offering a portion of WQI funding statewide allowed each county to participate. This funding, along with a targeted approach, engaged more farmers and landowners in the process.

Year-end totals of fall established practices through the WQI Statewide cost-share program was over 88,000 acres of cover crops and over 2,000 acres of N inhibitor.

Practices Offered Through Statewide WQI Funding in 2013



No-Till



Strip-Till



Cover Crops



Nitrification Inhibitor



Iowa Leaders in Conservation:

Six years of no-till proved its value in a 48-hour time span last spring for Hawarden farmer Nate Ronsiek. A pounding 3-inch rainstorm, followed by a 5-inch downpour the next day, washed away topsoil and created rills and gullies in some area farm fields. But the soil in Ronsiek's no-till fields held firm.

"I didn't have a single gully wash out," he said. "It takes a long time to build that soil back up. Anything you can do to save any of that, it's huge. Just seeing what happened after 8 inches of rain in two nights makes a big difference. There's no way I'd go back to conventional tillage."

-Nate Ronsiek No-till Farmer, Sioux County

[Find out about more Iowa Leaders in Conservation at CleanWaterIowa.org](http://CleanWaterIowa.org)

Point Source (Courtesy of Iowa DNR)

The point source portion of the nutrient reduction strategy established a process to achieve significant reductions in the amounts of nitrogen and phosphorus discharged to Iowa's rivers and streams by the largest industrial and municipal wastewater treatment plants. Major point sources will be required to assess the feasibility and reasonableness of reducing the amounts of nitrogen and phosphorus discharged to Iowa surface waters. Practices determined to be feasible and affordable will be required to be implemented.

The process is unique and innovative. In the traditional approach limits are established in a permit and treatment facilities are constructed to meet those limits. In this approach, nutrient reduction facilities are constructed, sampling is performed and technology-based limits are developed using actual treatment plant performance data.

Eight (8) National Pollutant Discharge Elimination System permits have already been issued with provisions to implement the strategy with intent to issue 20 permits per year. Several treatment plants that were already under construction while the strategy was being developed voluntarily included nutrient removal processes in their design including the Cities of Clinton and Iowa City.



Iowa Leaders in Conservation:

In 2009, the City of Clinton's engineering consultant, HDR Engineering (HDR), began designing a new 12-million gallon per day regional wastewater treatment plant with biological nutrient removal (BNR), known as the Clinton Regional Wastewater Reclamation Facility (RWRF). The Clinton RWRF incorporates facilities that proactively reduce ammonia and provide for biological nutrient removal.

Although the stricter nutrient discharge limits are not expected to be regulated for another five to ten years, Clinton chose to incorporate an advanced level of treatment to proactively position themselves for anticipated future standards. The Clinton RWRF is one of, if not the first, such plant in Iowa. It also provides for considerable future industrial development and growth.

[Find out about more Iowa Leaders in Conservation at CleanWaterIowa.org](http://CleanWaterIowa.org)

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Nutrient Research Center

Approved Projects

Resulting from the 2013 Iowa legislative session, the Iowa Board of Regents created the Iowa Nutrient Research Center (NRC) and its advisory council at Iowa State University.

The purpose of the center is to pursue a science-based approach to nutrient management research including, but not limited to, evaluating the performance of current and emerging nutrient management practices, and using an adaptive management framework for providing recommendations for the implementation of nutrient management practices and the development of new nutrient management practices. In FY2013, \$1.5 million was allocated to establish the Iowa NRC and begin funding research projects.

Below is a list of the awarded projects through the Nutrient Research Center in 2013:

- Iowa Institute of Hydraulic Research (IIHR) - Hydrosience & Engineering Work Plan - U of I - \$528,332
- Distribution, Transport, and Biogeochemical Transformations of Agriculturally Derived Nitrogen and Phosphorus in the Cedar River Watershed - UNI - \$50,000
- Investigating causes of corn yield decreases following cereal rye winter cover crop - ISU - \$60,000
- Establishing pragmatically dynamic program for extending water quality BMP financial information: Farmer tools for Iowa Nutrient Reduction Strategy - ISU - \$27,772
- Social-economic research work plan - ISU - \$116,666
- Phosphorus transport in Iowa streams: Importance of stream bed and bank erosion - ISU - \$80,000
- Establishment and monitoring of saturated buffer within high-priority HUC-12 watersheds - ISU - \$120,000
- Nonpoint source nitrogen and phosphorus loads at implementation scale: Direct agricultural nutrient loads to surface waters in relation to land use and management - ISU - \$175,000
- Impacts of cover crops on phosphorus and nitrogen loss with surface runoff - ISU - \$220,000
- Bioreactor Research & Assessment of Woodchip Tile Denitrification Bioreactors: Optimal Design/Performance and Experimental Bioreactor Installation and Study - ISU - \$48,000



Iowa Leaders in Conservation:

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"We need to understand the agronomic side, the impacts of climate change, pests and pathogens and all of the economics of the practices we're testing. The cropping system has to be profitable and we have to help farmers understand how to manage it and work with them to implement and figure out what works on their farm. Only this broad systems approach is going to be effective in helping us solve our water quality problems."

-Dr. Matthew Helmers, Associate Professor of Agricultural and Biosystems Engineering,

Find out about more Iowa Leaders in Conservation at CleanWaterIowa.org

Targeted Demonstration Watershed Projects

IDALS issued a request for applications in August of 2013 for interested groups to establish targeted demonstration watershed projects. These projects are designed to help implement and demonstrate the effectiveness and adaptability of a host of conservation practices highlighted in the NRS on a watershed scale.

More than 30 partners from agriculture organizations, institutions of higher education, private industry, the local, state and federal government, and others, are working together on these projects with the Soil and Water Conservation Districts (SWCD) serving as the project leaders.

These projects will utilize the collective resources of their partners to demonstrate conservation practices paired with strong outreach and education components. This effort will promote increased awareness and adoption of available practices and technologies. Successful projects will serve as local and regional hubs for demonstrating practices and providing practice information to farmers, peer networks, and local communities.

List of awarded Demonstration Projects in 2013:

1.) Benton/Tama Nutrient Reduction Demonstration Project-Benton SWCD

Grant award: \$468,000 Total project: \$747,000

2.) Boone River Watershed Nutrient Management Initiative-Wright SWCD

Grant award: \$1,009,803 Total project: \$1,853,103

3.) Central Turkey River Nutrient Reduction Demonstration Project-Winneshiek SWCD

Grant award: \$498,000 Total project: \$5,529,924

4.) Demonstration of Targeted Nutrient Reduction Systems for Clayton County-Clayton SWCD

Grant award: \$207,000 Total project: \$333,000

5.) Miller Creek Water Quality Improvement Project-Black Hawk SWCD

Grant award: \$499,530 Total project: \$751,501

6.) Van Zante Creek Water Quality Improvement Project-Marion SWCD

Grant award: \$639,839 Total project: \$1,534,839

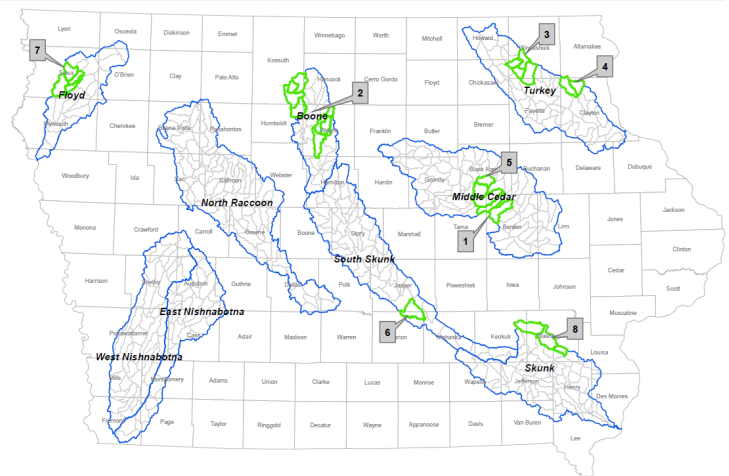
7.) West Branch of the Floyd River Water Quality Initiative-Sioux SWCD

Grant award: \$360,000 Total project: \$608,000

8.) West Fork Crooked Creek Water Quality and Soil Health Initiative-Washington SWCD

Grant award: \$484,250 Total project: \$866,800

WQI HUC12 Watershed Applications
2013 Awarded Projects



WRCC designated HUC 8 watersheds are outlined in blue. The awarded projects areas are outlined in green.

Overview

On Monday October 28, 2013 Gov. Terry Branstad and Lt. Gov. Kim Reynolds joined Iowa Secretary of Agriculture Bill Northey and Department of Natural Resources Director Chuck Gipp for the launch of the www.CleanWaterIowa.org website. Iowans can visit the site to learn more about the voluntary, science-based practices that can be implemented on farms and in cities to improve water quality.

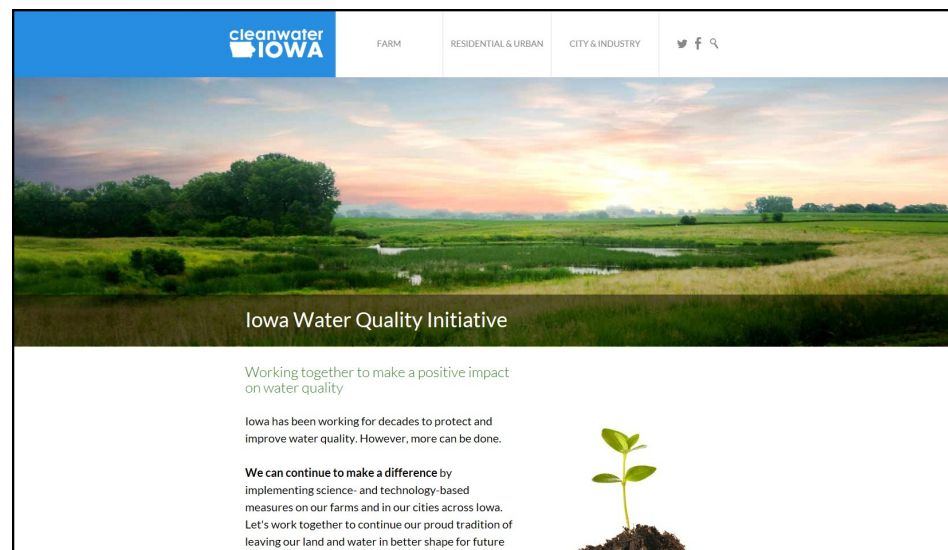
The site has “Farm,” “Residential & Urban,” and “City & Industry” sections that provide information about science-based practices that can improve water quality. The site includes descriptions of water quality practices, their benefits, and links to additional information.

Newsletter sign-up

A newsletter is emailed out to anyone who subscribes on the main page of the CleanWaterIowa.org website. Each newsletter includes updates from the past few weeks, and a link to the full News & Blog article or Practice at Work success story.

Social Media

Iowans can also follow @CleanWaterIowa on Twitter or “like” the page on Facebook to receive updates and other information about the ongoing Iowa water quality initiative.



Iowa Leaders in Conservation:

“One reason strip-till has grown in popularity is that farmers can complete field operations in just two passes – making strips in the fall and simultaneously planting and applying nitrogen fertilizer in the spring,” he said. “Where no-till is not feasible, strip-till is the next best practice for reducing soil erosion.”

Like many Iowa farmers, Smith applies cereal rye which overwinters, sequesters nitrogen, and helps reduce soil erosion. “I like cereal rye because you can see it coming up quickly,” he said. “It grows well. I think that’s where farmers should start with cover crops.”

-Tim Smith, Strip-till/Cover Crop Farmer, Wright County

[Find out about more Iowa Leaders in Conservation at CleanWaterIowa.org](http://www.CleanWaterIowa.org)



Tracking/Accountability

The Water Resources Coordinating Council (WRCC) established the Measures of Success subcommittee to develop a list of measures to help document and track the progress of water quality improvements in Iowa. When finalized, these indicators will have the ability to be aggregated at a watershed and state scale to evaluate cumulative impacts and trends.

Recognizing that a variety of factors affect changes to water quality and that the impact of installing conservation practices on a large scale cannot be seen immediately through water monitoring, this subcommittee is also identifying additional metrics to document positive trends.

Examples of measures/indicators:

- Water Quality testing
- Conservation Practice Adoption/Tracking
- Crop performance
- Soil quality/health
- Economic indicators
- Social/cultural indicators

The subcommittee has begun to look at the best way to track adoption of all conservation practices including those installed without cost-share or other public assistance. Many service providers and farmers have indicated that a majority of the conservation practices are installed with no public assistance which makes it more difficult to track and document these practices.

Cover Crops Are Taking Off in Iowa

In 2013, approximately 230,000 total acres were seeded to cover crops through both Federal and State cost-share programs, up from approximately 64,700 acres in 2012.

The chart to the right shows cover crop acreage in Iowa through public cost-share assistance. This chart does not include acres of cover crops established by landowners without cost-share assistance.

